20020 "A002207

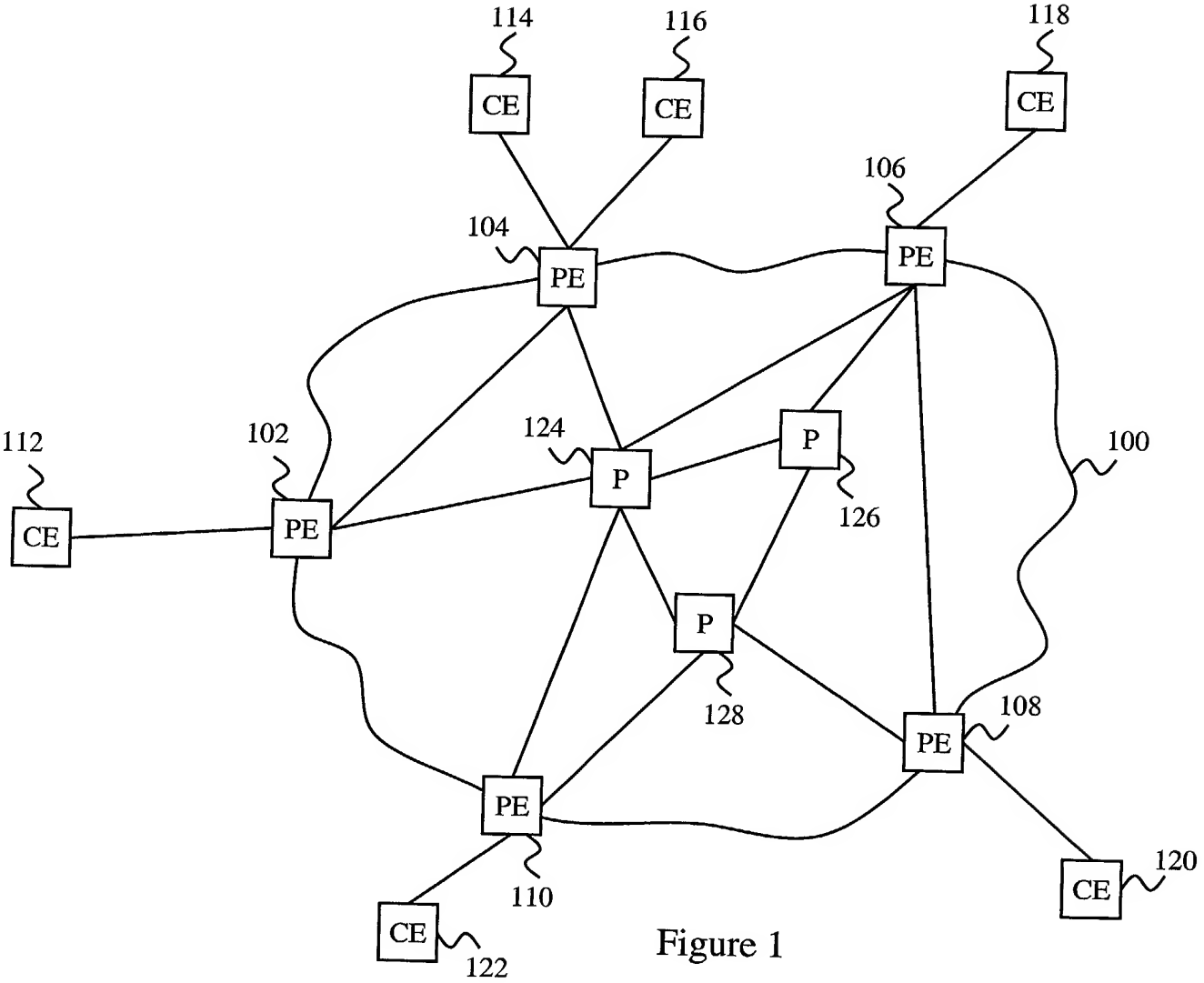

Figure 1

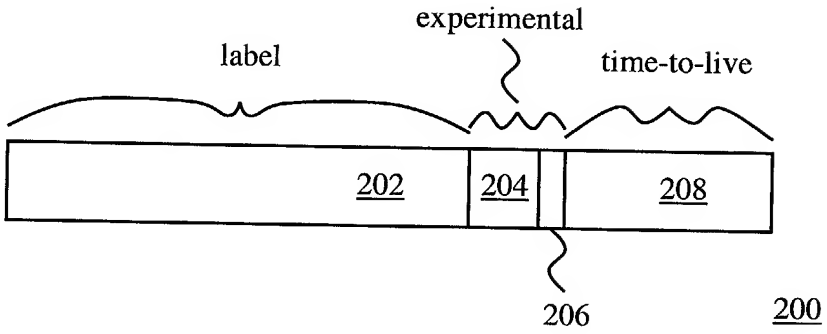

Figure 2

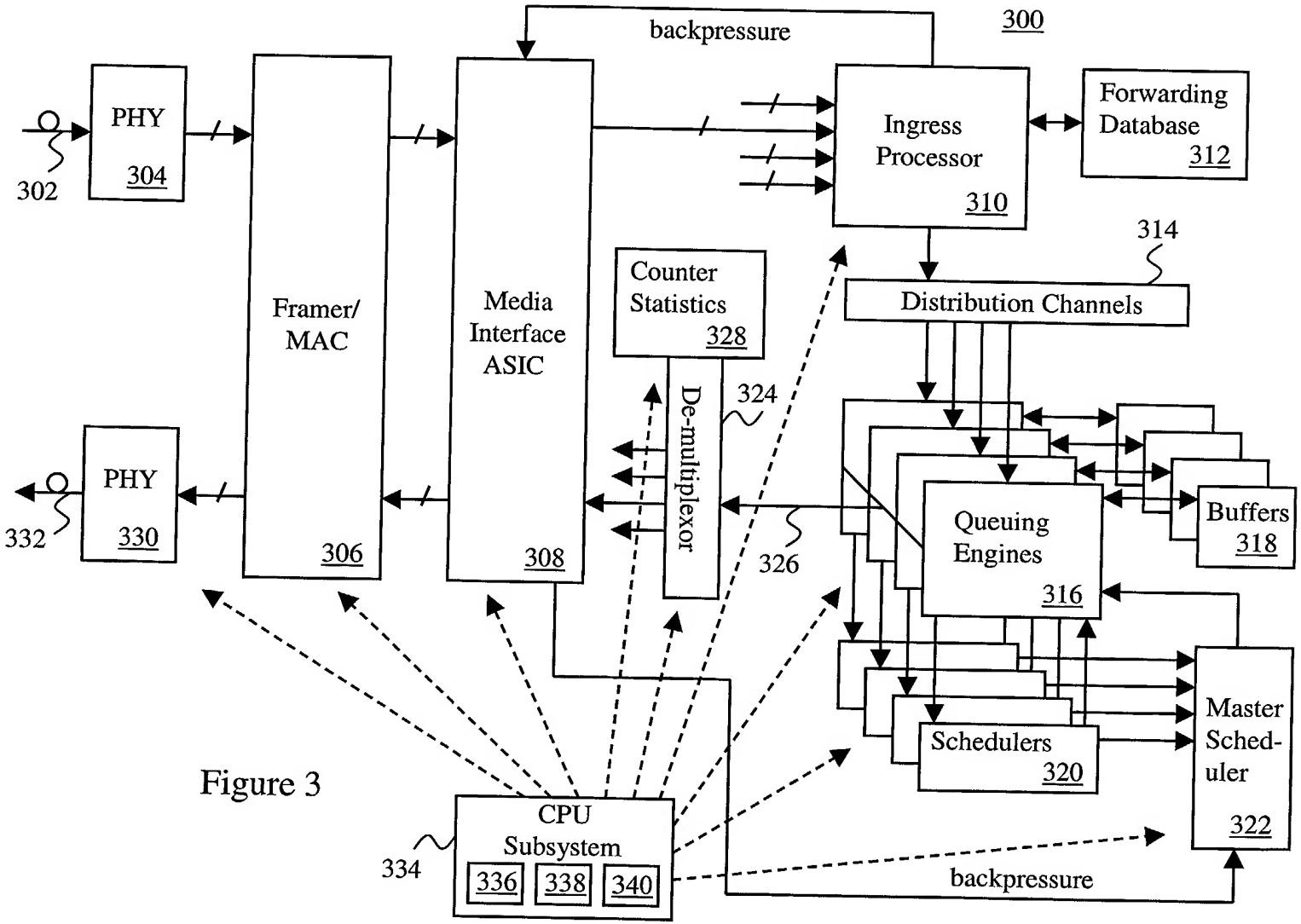
backpressure
300
PHY
304
302
Framer/
MAC
306
Media
Interface
ASIC
308
Ingress
Processor
310
Forwarding
Database
312
314
Distribution Channels
Counter
Statistics
328
De-multiplexor
324
326
PHY
330
332
Queuing
Engines
316
Buffers
318
Schedulers
320
Master
Sched-
uler
322
CPU
Subsystem
336
338
340
334
backpressure

Figure 3

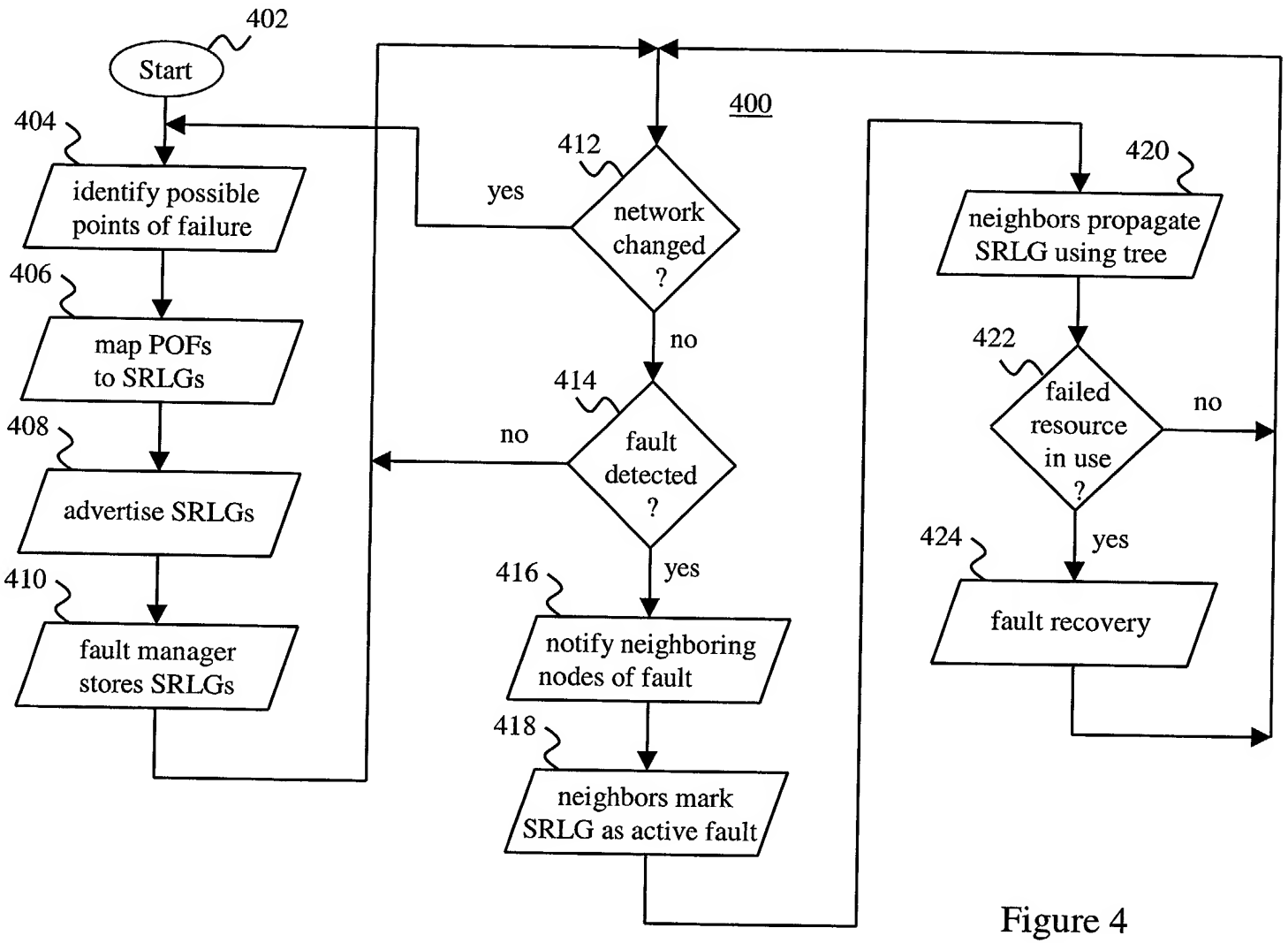
402
Start
404
identify possible points of failure
406
map POFs to SRLGs
408
advertise SRLGs
410
fault manager stores SRLGs
400
412
network changed ?
yes
no
414
fault detected ?
no
yes
416
notify neighboring nodes of fault
418
neighbors mark SRLG as active fault
420
neighbors propagate SRLG using tree
422
failed resource in use ?
no
yes
424
fault recovery

Figure 4

20020-0002.001

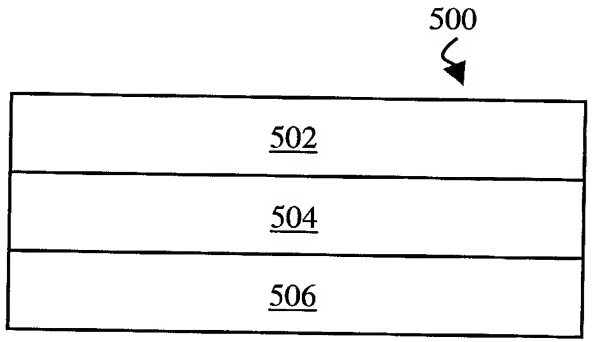

Figure 5

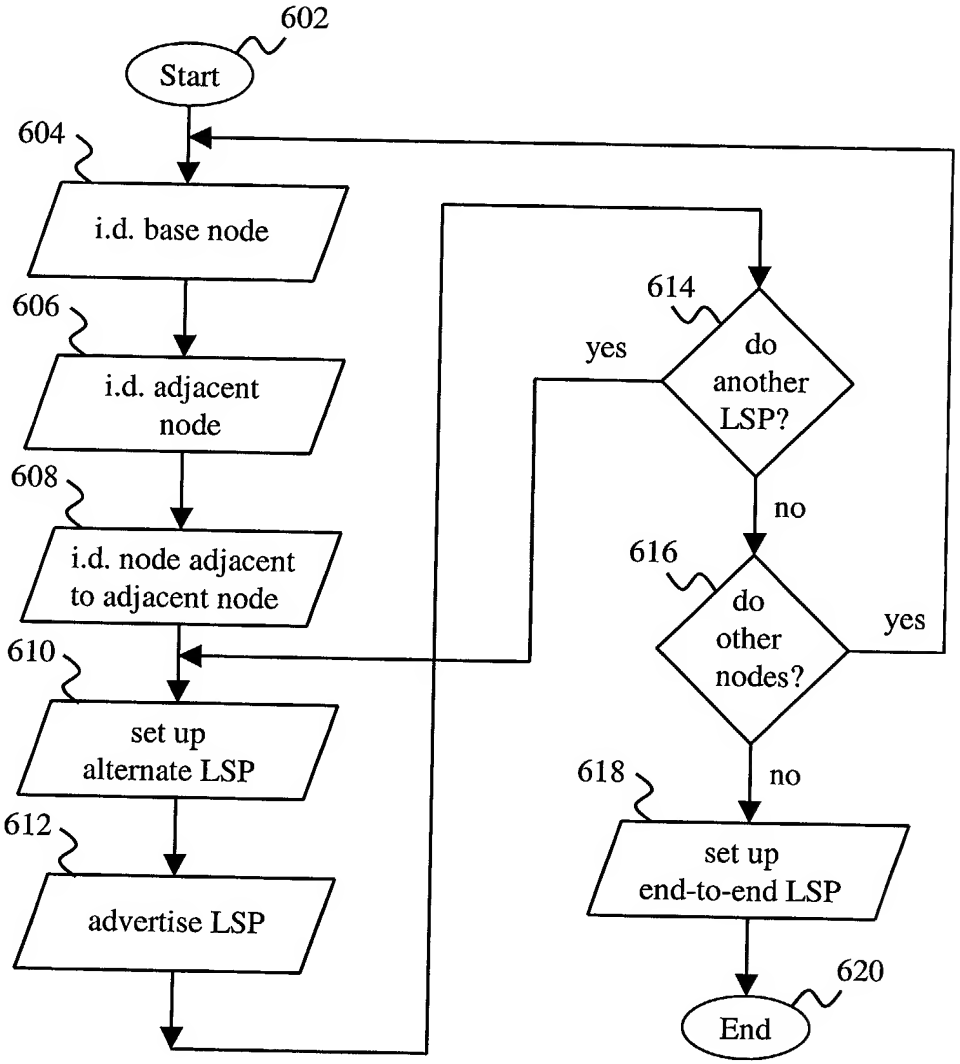
602
Start
604
i.d. base node
606
i.d. adjacent node
608
i.d. node adjacent to adjacent node
610
set up alternate LSP
612
advertise LSP
614
do another LSP?
yes
no
616
do other nodes?
yes
no
618
set up end-to-end LSP
620
End
600A

Figure 6A

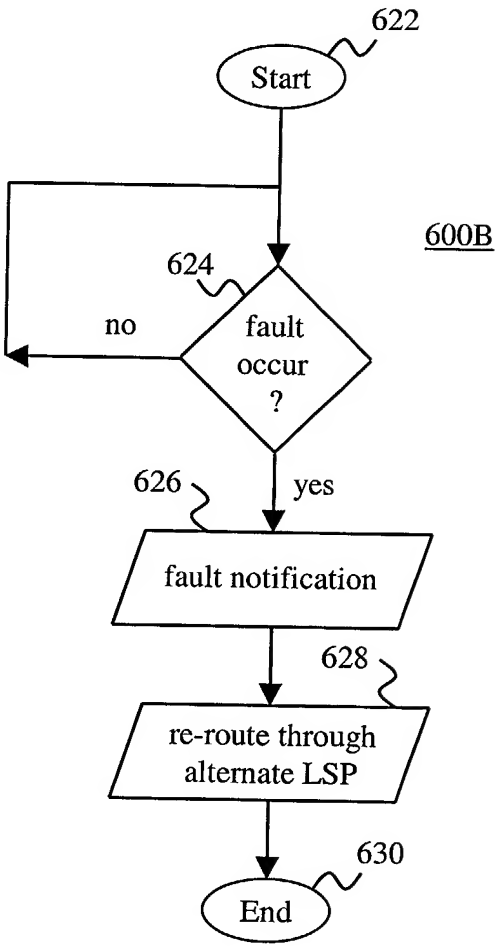
622
Start
600B
624
fault occur ?
no
yes
626
fault notification
628
re-route through alternate LSP
630
End

Figure 6B

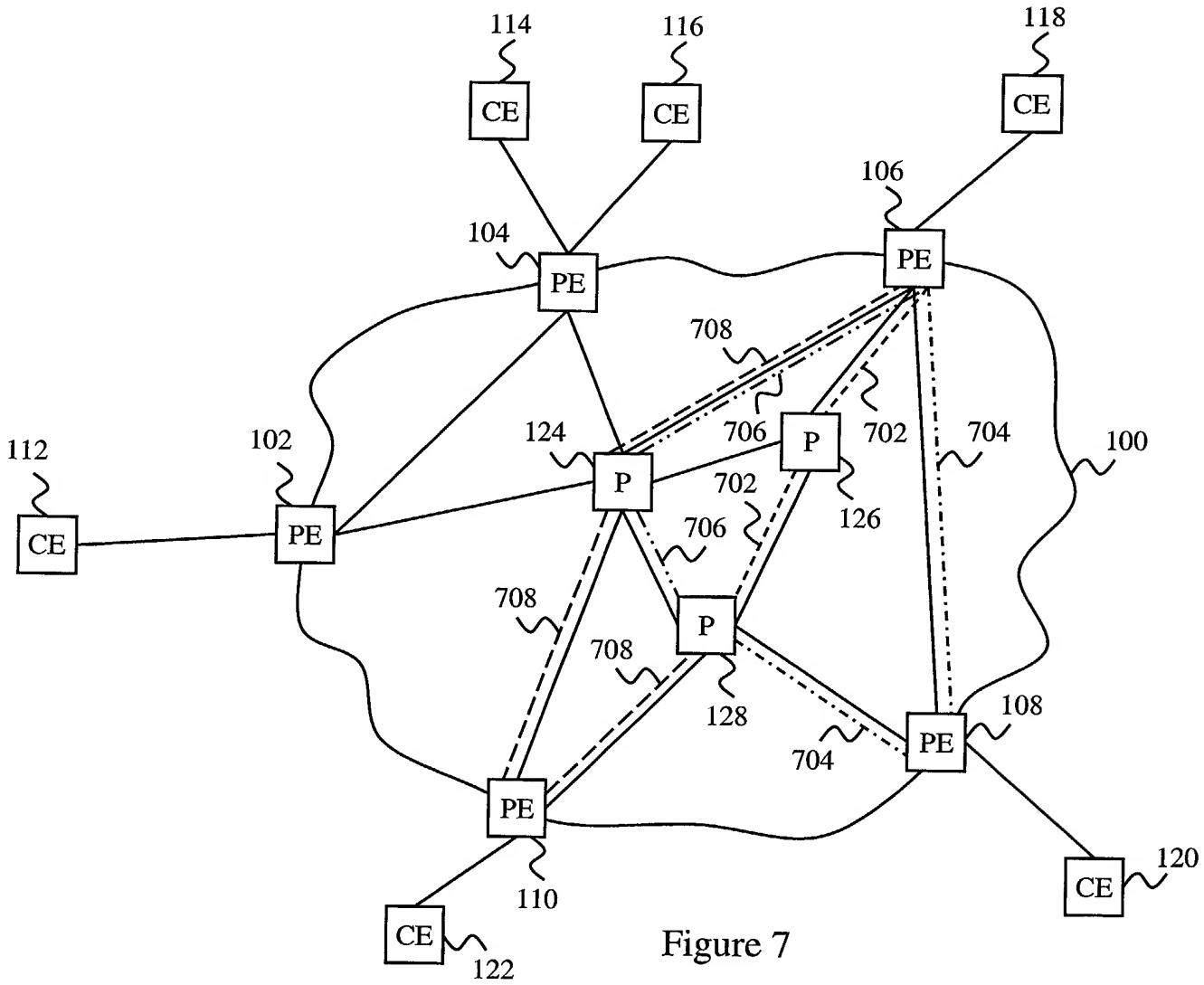
114
116
118
CE
CE
CE
106
104
PE
PE
708
706
P
702
704
100
124
P
702
126
112
102
CE
PE
706
708
P
708
128
108
PE
704
PE
110
CE
120
CE
122

Figure 7

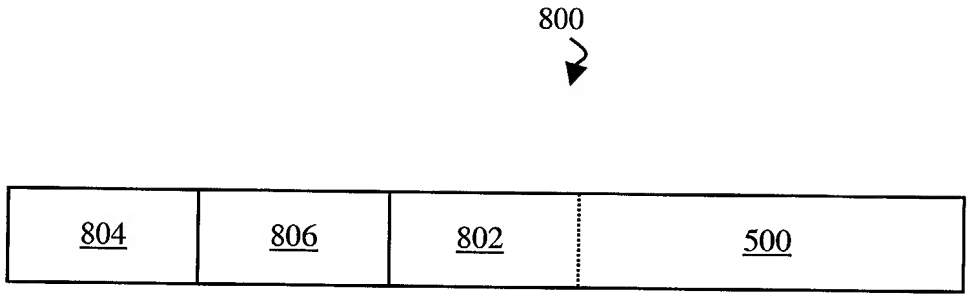

Figure 8

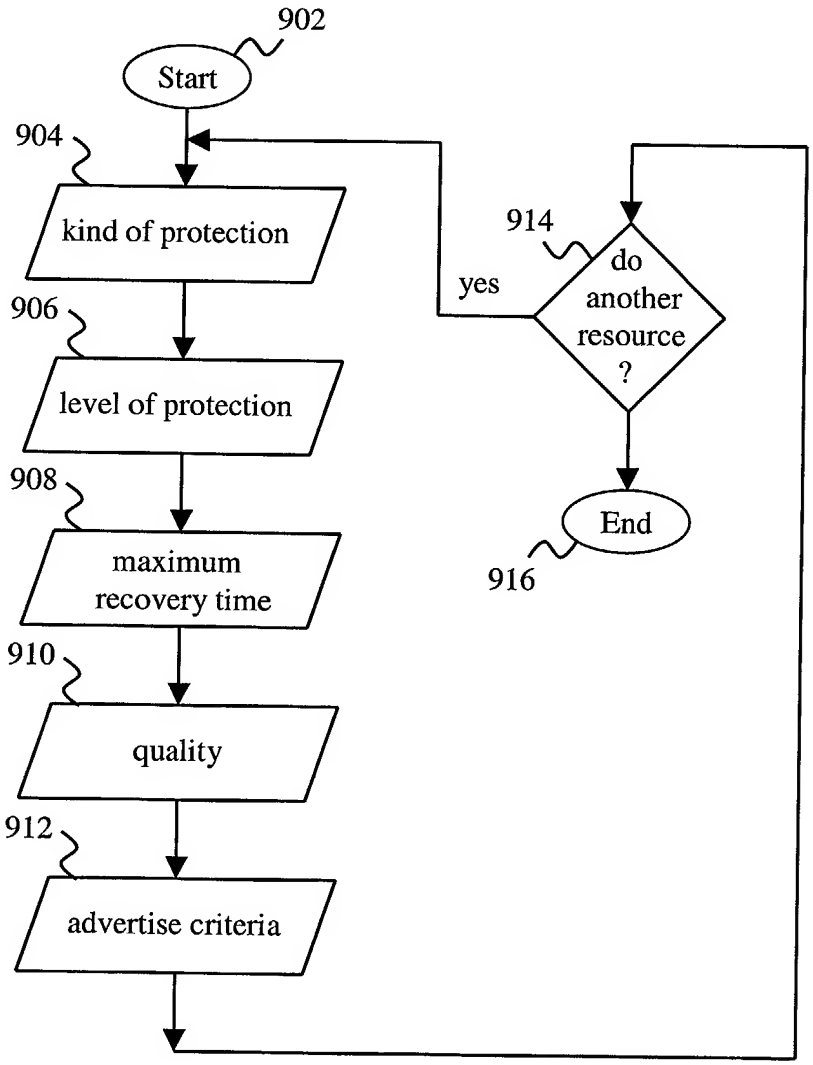
902
Start
900A
904
kind of protection
906
level of protection
908
maximum recovery time
910
quality
912
advertise criteria
914
do another resource ?
yes
End
916

Figure 9A

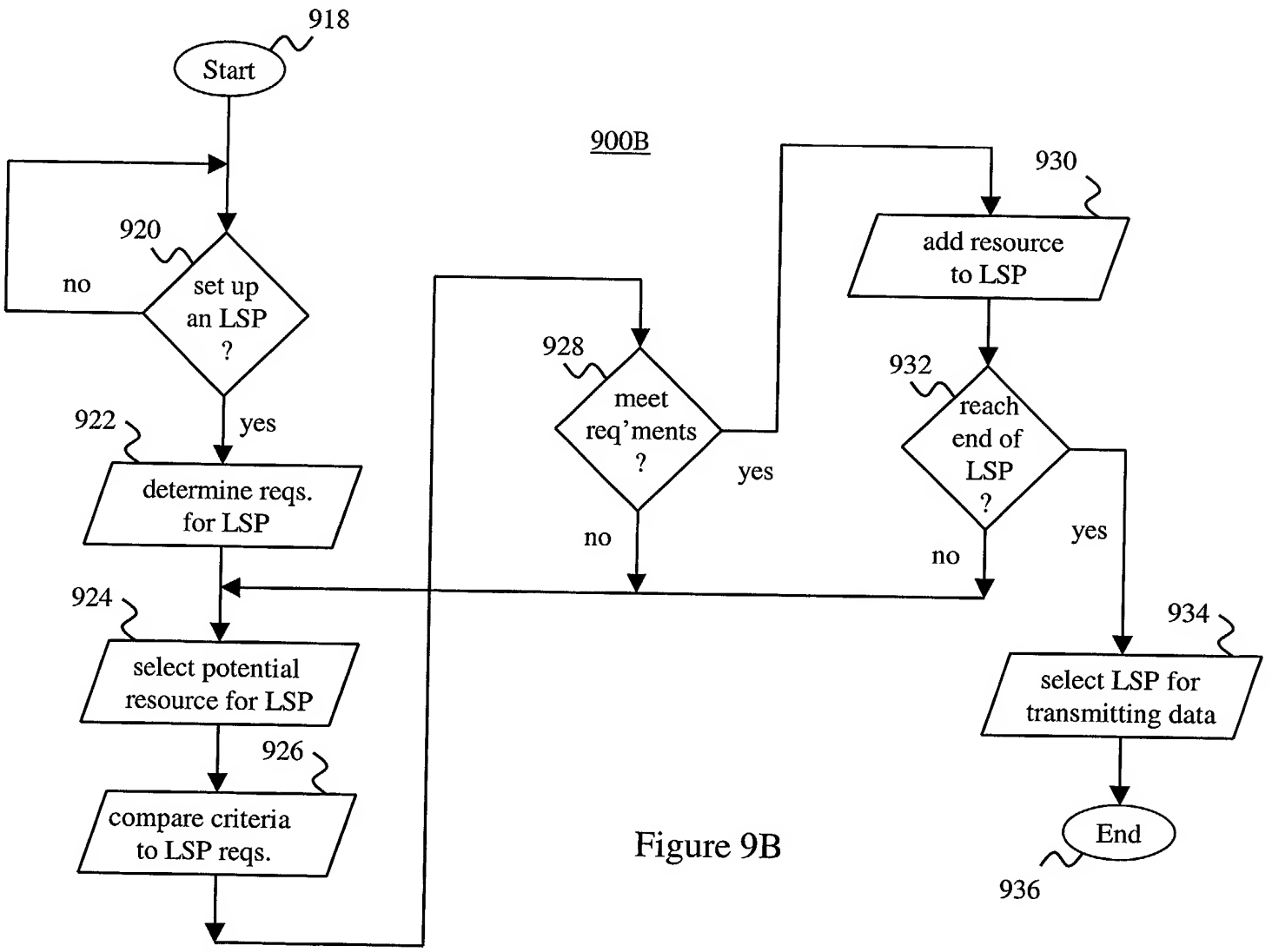
900B
Start
918
920
set up an LSP ?
no
yes
922
determine reqs. for LSP
924
select potential resource for LSP
926
compare criteria to LSP reqs.
928
meet req'ments ?
yes
no
930
add resource to LSP
932
reach end of LSP ?
no
yes
934
select LSP for transmitting data
End
936

Figure 9B